

Amendments to the Claims

This listing of claims, if entered, will replace all prior versions and listings of claims in the above-identified application.

Listing of Claims

1-94. Canceled

95. **(Currently Amended)** An apparatus configured to customize a product and comprising a computer-readable storage medium encoding logic blocks of a program code configured to be executed by a processor, the logic blocks comprising:

- a first logic block to create a customizable product, the customizable product including a set of one or more attributes to define the customizable product;
- a second logic block to assign the customizable product to a customizable product class, wherein the customizable product class is a parent class of a hierarchy defining a configurator, and the configurator is configured to reference the hierarchy to permit a user to configure a customizable product for purchase **using a customizable user interface (“UI”)**;
- a third logic block to add a component product class to the customizable product class, wherein the component product class is a subclass of the customizable product class, and the component product class comprises one or more component products selectable **by said user using said customizable UI** for adding to the customizable product;
- a fourth logic block to provide natural language templates, wherein each template contains a fill-in-the-blank sentence in a natural language syntax;
- a fifth logic block to add a customizable class rule to the customizable product class, wherein

the customizable class rule prohibits the selection of one or more component products **by said user** for addition to the customizable product after selection of a specific component product **by said user** for addition to the customizable product, and

the customizable class rule is generated by selecting one or more natural language templates, and filling in each blank in each selected template with one or more of said customizable product class, said component product class, an attribute of said customizable product class, an attribute of said component product class, a mathematical expression, and a non-selected natural language template; and

a sixth logic block to map **[[a]] said** customizable **UI user interface (“UI”)** to the customizable product class, the customizable UI to provide access structure to the configurator.

96. (Previously presented) The apparatus of claim 95 wherein the component product class includes component product subclasses.
97. (Previously presented) The apparatus of claim 95 wherein the component product class inherits the attributes of the customizable product class.
98. (Previously Presented) The apparatus of claim 95 further comprising:
a seventh logic block to add one or more component product classes to a port; and
an eighth logic block to add the port to the customizable product class, the port to allow the configurator to classify a group of component products.
99. (Previously presented) The apparatus of claim 98 wherein the port includes a cardinality attribute, the cardinality attribute to constrain the number of component products, associated with the port, selectable by the configurator.

100. (Previously presented) The apparatus of claim 99 wherein the cardinality attribute includes a minimum cardinality and a maximum cardinality, the minimum cardinality to constrain the minimum number of component products to be added by the configurator, the maximum cardinality to constrain the maximum number of component products to be added by the configurator.

101. (Previously presented) The apparatus of claim 99 wherein the cardinality attribute includes a default cardinality, the default cardinality defines a quantity of the component product class to be added by the configurator.

102. **(Currently Amended)** The apparatus of claim 95 wherein the class rule includes a collection of expressions, the expressions include a property path, a constant, and **[[a]] an** operator.

103. Canceled

104. (Previously presented) The apparatus of claim 95 wherein the class rule is a subclass of the customizable product class.

105-112. Canceled

113. (Previously presented) The apparatus of claim 95 wherein the component product class includes a static attribute, the static attribute is not associated with a parent class.

114. (Previously presented) The apparatus of claim 95 wherein the component product class, customizable class rule, and customizable UI are object oriented classes.

115. **(Currently Amended)** The apparatus of claim 95 wherein the customizable product comprises **[[a]] an** object oriented structure.

116. (Previously presented) The apparatus of claim 95 wherein the customizable product includes versioning.

117. (Previously presented) The apparatus of claim 95 wherein the configurator is stored in a data store.

118. (Previously presented) The apparatus of claim 95 wherein the customizable UI is configured to allow customization of a presentation of component products.

119. (Previously presented) The apparatus of claim 118, wherein the customizable UI is configured to be customized for a particular product line.

120. (Previously presented) The apparatus of claim 118, wherein the customizable UI is configured to be customized for a particular customer base.

121. (Previously presented) The apparatus of claim 95 wherein the customizable UI is configured to allow a runtime session to dynamically generate a UI from a custom UI class.